DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney of Record David Jones, on 4/14/2011.

Please, amend **claim 59** as follows**:**

Claim 59: (Currently Amended): A system according to claim [[58]] 52, wherein said URL includes a hostname portion that is specific to said worksite.

Please, amend **the specifications** as follows**:**

Please add the following heading at page 1, immediately before the first paragraph beginning with "The invention relates":

FIELD OF THE INVENTION

Please add the following heading at page 1, between paragraph 1 ending in "mining, etc." and paragraph 2 beginning with "Such management":

BACKGROUND

Please add the following heading at page 3, between paragraph 6 ending in “performance and service of the vehicle.” and paragraph 7 beginning with “According to a first aspect,”:

SUMMARY

Please add the following heading at page 9, between paragraph 1 ending in “to the fourth object.” and paragraph 2 beginning with “The invention and its advantages”:

BRIEF DESCRIPTION OF THE DRAWINGS

Please add the following heading at page 10, between paragraph 2 ending in “whether or not to relay a message it has received.” and paragraph 3 beginning with “The example of the worksite 20”:

DETAILED DESCRIPTION

Response to Arguments

In response to communications filed 3/26/2011, applicant amends claims 29, 33, 36, 40-42, 44, 46, 52, 61, 62, 66, 68-70, adds claim 71 and cancels claims 35, 58, 60. Claims 1-28, 30, 31, 37, 39, 53, 54, were previously cancelled. Claims 29, 32-34, 36, 38, 40-52, 55-57, 59, 61-71 are presented for examination. The amendments to claims 29, 40 and 41 overcome the rejections of said claims under 25 U.S.C 112, second

paragraph. Therefore, the rejection is withdrawn. The amendments to claims 29, 52, 61, 66, and 68 include allowable subject matter previously recited in claim 35, 58 and 60. With regards to the prior art rejection of claims 29, 32-34, 36, 38, 40-52, 55-57, 59, 61-70, Applicant's remarks, filed on 3/26/2011, have been fully considered and are persuasive in light of the Examiner's amendment above.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The closest prior art of record is U.S. PGPUB 20020059320 issued to Tamaru published on May16, 2002. Tamaru teaches a machine management system on a worksite including fixed machines and mobile construction machines, organized in a hierarchy where a leader machine directs follower machines. The machines on the worksite communicate through communications links.

Tamaru whether alone or in combination with the other prior arts of record, fails to teach:

"*storing a correspondence between each said networked item of apparatus and an address structure reflecting the hierarchical position of that networked item of apparatus in said determined dependency relationship of the civil engineering, landscaping, road or rail link construction, or mining worksite in a database, the networked items of apparatus including the mobile items and fixed items of apparatus; operating by converting a first address structure reflecting the hierarchical position of a selected earth moving mobile networked item of apparatus into a corresponding first*

device address for accessing said selected earth moving mobile networked item of apparatus on said electronic data network;

using that first device address to establish a communications link with said selected earth moving mobile networked item of apparatus, via its communications interface, in response to a first call for position coordinates addressed with an address structure reflecting the hierarchical position of said selected earth moving mobile networked item of apparatus;

operating by converting a second address structure reflecting the hierarchical position of a selected fixed networked item of apparatus into a corresponding second device address for accessing said selected fixed networked item of apparatus on said electronic data network;

using that second device address to establish a communications link with said fixed networked item of apparatus, via its communications interface, in response to a second call for position coordinates addressed with an address structure reflecting the hierarchical position of said selected fixed item of apparatus;

wherein said address structure reflecting the hierarchical position of fixed or mobile items of apparatus includes a Uniform Resource Locator (URL), said URL having a directory-path portion corresponding to said address structure reflecting the hierarchical position of said fixed or mobile selected item of apparatus;

assigning a separate class/sub-class, in said hierarchical position to items of apparatus as a function of whether they are fixed or mobile on the worksite; and

wherein hierarchical positions of fixed or mobile items of networked apparatus are

dynamically changeable based on the progress of the worksite, addition of one or more new items of apparatus to the worksite, and reassignment of one or more items of apparatus on the worksite";

as recited in claim 29.

Tamaru whether alone or in combination with the other prior arts of record, fails to teach:

means for storing a correspondence between both a selected earth moving mobile item of apparatus and a selected fixed item of apparatus and an address structure reflecting the hierarchical position of those items of apparatus in said determined dependency relationship of the outdoor worksite in a database;

means for operating by converting said address structures reflecting the hierarchical positions of the selected items of apparatus into corresponding device addresses for accessing said selected items of apparatus on said electronic network; and

means operating on the basis of said device addresses to establish communications links with the selected items of apparatus, via their communications interfaces, in response to a call for position coordinates addressed with an address structure reflecting the hierarchical position of said selected items of apparatus, wherein:

the address structure reflecting the hierarchical position of fixed or mobile items of apparatus is a Uniform Resource Locator (URL), the URL having a directory-path portion corresponding to said address structure reflecting the

hierarchical position of said fixed or mobile selected item of apparatus; and hierarchical positions of fixed or mobile items of networked apparatus are dynamically changeable based on the progress of the worksite, addition of one or more new items of apparatus to the worksite, and reassignment of one or more items of apparatus on the worksite";

as recited in claim 52.

Tamaru whether alone or in combination with the other prior arts of record, fails to teach:

storing a correspondence between each said networked item of apparatus and an address structure reflecting the hierarchical position of that networked item of apparatus in said determined dependency relationship of the civil engineering, landscaping, road or rail link construction, or mining worksite in a database, the networked items of apparatus including the mobile items and fixed items of apparatus, wherein said address structure reflecting the hierarchical position of fixed or mobile items of apparatus includes a Uniform Resource Locator (URL), said URL having a directory-path portion corresponding to said address structure reflecting the hierarchical position of said fixed or mobile selected item of apparatus;

operating by converting said address structure reflecting a first hierarchical position of a selected networked item of apparatus into a corresponding device address for accessing said selected networked item of apparatus on said electronic data network;

using that device address to establish a communications link with said selected networked item of apparatus, via its communications interface, in response to a call addressed with an address structure reflecting the hierarchical position of said selected networked item of apparatus; and

converting an address structure designating an item of apparatus to be accessed in accordance with a second hierarchy, the second hierarchy being different from the hierarchy used by the management means to organize the hierarchical levels according to said determined dependency relationship, into the address in said electronic network of said designated item of apparatus, wherein the second hierarchy defines a type of networked item of worksite apparatus, wherein the first and second hierarchies are dynamically changeable based on the progress of the worksite, addition of one or more new items of apparatus to the worksite, and reassignment of one or more items of apparatus on the worksite";

as recited in claim 61.

Tamaru whether alone or in combination with the other prior arts of record, fails to teach:

storing a correspondence between each said networked item of apparatus and an address structure reflecting the hierarchical position of that networked item of apparatus in said determined dependency relationship of the civil engineering, landscaping, road or rail link construction, or mining worksite in a database, the networked items of apparatus including the mobile items and [[static]]fixed items of apparatus;

operating by converting said address structure reflecting the hierarchical position of a selected networked item of apparatus into a corresponding device address for accessing said selected networked item of apparatus on said electronic data network, wherein said address structure reflecting the hierarchical position of fixed or mobile items of apparatus includes a Uniform Resource Locator (URL), said URL having a directory-path portion corresponding to said address structure reflecting the hierarchical position of said fixed or mobile selected item of apparatus;

using that device address to establish a communications link with said selected networked item of apparatus, via its communications interface, in response to a call for position coordinates addressed with an address structure reflecting the hierarchical position of said selected networked item of apparatus, wherein the hierarchical position of the selected networked item of apparatus is dynamically changeable based on the progress of the worksite, addition of one or more new items of apparatus to the worksite, and reassignment of the selected networked item of apparatus on the worksite;

receiving a position message from the selected networked item of apparatus the position message containing the coordinates of the selected networked item of apparatus and its identification information; and

updating a position table with the coordinates of the selected networked item of apparatus";

as recited in claim 66.

Tamaru whether alone or in combination with the other prior arts of record, fails to teach:

"storing a correspondence between each said networked item of apparatus and an address structure reflecting the hierarchical position of that networked item of apparatus in said determined dependency relationship of the civil engineering, landscaping, road or rail link construction, or mining worksite in a database, the networked items of apparatus including the mobile items and fixed items of apparatus, wherein said address structure reflecting the hierarchical position of fixed or mobile items of apparatus includes a Uniform Resource Locator (URL), said URL having a directory-path portion corresponding to said address structure reflecting the hierarchical position of said fixed or mobile selected item of apparatus;

operating by converting said address structure reflecting the hierarchical position of a selected networked item of apparatus into a corresponding device address for accessing said selected networked item of apparatus on said electronic data network, the device address including data identifying a context of the selected networked item of apparatus such that the selected networked item of apparatus is ascertainable from other networked items of apparatus on the worksite from the device address alone; and using that device address to establish a communications link with said selected networked item of apparatus, via its communications interface, in response to a call addressed with an address structure reflecting the hierarchical position of said selected networked item of apparatus, wherein the hierarchical position of the selected

networked item of apparatus is dynamically changeable based on the progress of the worksite, addition of one or more new items of apparatus to the worksite, and reassignment of the selected networked item of apparatus on the worksite";

as recited in claim 68.

Consequently, claims 29, 52, 61, 66 and 68 are allowable over the prior art of record.

Claims 32-34, 36, 38, 40-51, 55-57, 59, 62-65, 67, and 69-71 are either directly or indirectly dependent upon claims 29, 52, 61, 66 and 68, and therefore they are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CATHERINE THIAW whose telephone number is (571)270-1138. The examiner can normally be reached on 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CARL COLIN can be reached on 571-272-3862. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. T./
Examiner, Art Unit 2493
4/14/2011

/Carl Colin/
Supervisory Patent Examiner, Art Unit 2493